

Claims

[c1] I claim:

1. A method of manufacturing a diaphragm backing plate for use in a brake booster comprising the steps of: moving a coil of metal to a first station, said coil having a first and second sides to define a first width; applying a force to remove a section from the roll of metal to create a first plate defined by a peripheral surface having equal and parallel sides connected to each other by an arcuate segment each of which has a radius that is approximately equal to one-half of the width of the coil plus a minimum width of a desired lip for the diaphragm backing plate; and moving the plate to a second station and thereafter rolling the peripheral surface on said plate to define a uniform diameter for said plate that is approximately equal to said first width of said coil less twice minimum width for said lip.

[c2] 2. The method as recited in claim 1 further including the step of;utilizing said parallel sides of said first plate to align the first plate in a die at said second station to perform the step of rolling the peripheral surface.

- [c3] 3. The method as recited in claim 2 further including the step of;
punching a pilot hole at the axial center of said coil of metal such that the radius is defined along x and y coordinates of the pilot hole of said first plate.
- [c4] 4. The method as recited in claim 2 further including the step of:punching a pilot hole along the axial center of said coil at distance that is equal to said radius to define an axial center for a next plate.
- [c5] 5. The method as recited in claim 4 wherein said step of removing a section of said coil includes the forming of complimentary sides for said first plate and next plates.
- [c6] 6. The backing plate produced by the method as recited in claim 5.